

STATE OF GEORGIA
TIER 2 TMDL IMPLEMENTATION PLAN **REVISION** ____
 Segment Name: Mineral Springs
 Chattahoochee River Basin

Local Watershed Governments: City of Newnan

I. INTRODUCTION

Total Maximum Daily Load (TMDL) Implementation Plans are platforms for evaluating and tracking water quality protection and restoration. These plans have been designed to accommodate continual updates and revisions as new conditions and information warrant. In addition, field verification of watershed characteristics and listing data has been built into the preparation of the plans. The overall goal of the plans is to define a set of actions that will help achieve water quality standards in the state of Georgia.

This implementation plan addresses the general characteristics of the watershed, the sources of pollution, stakeholders and public involvement, and education/outreach activities. In addition, the plan describes regulatory and voluntary practices/control actions (*management measures*) to reduce pollutants, milestone schedules to show the development of the management measures (*measurable milestones*), and a monitoring plan to determine the efficiency of the management measures.

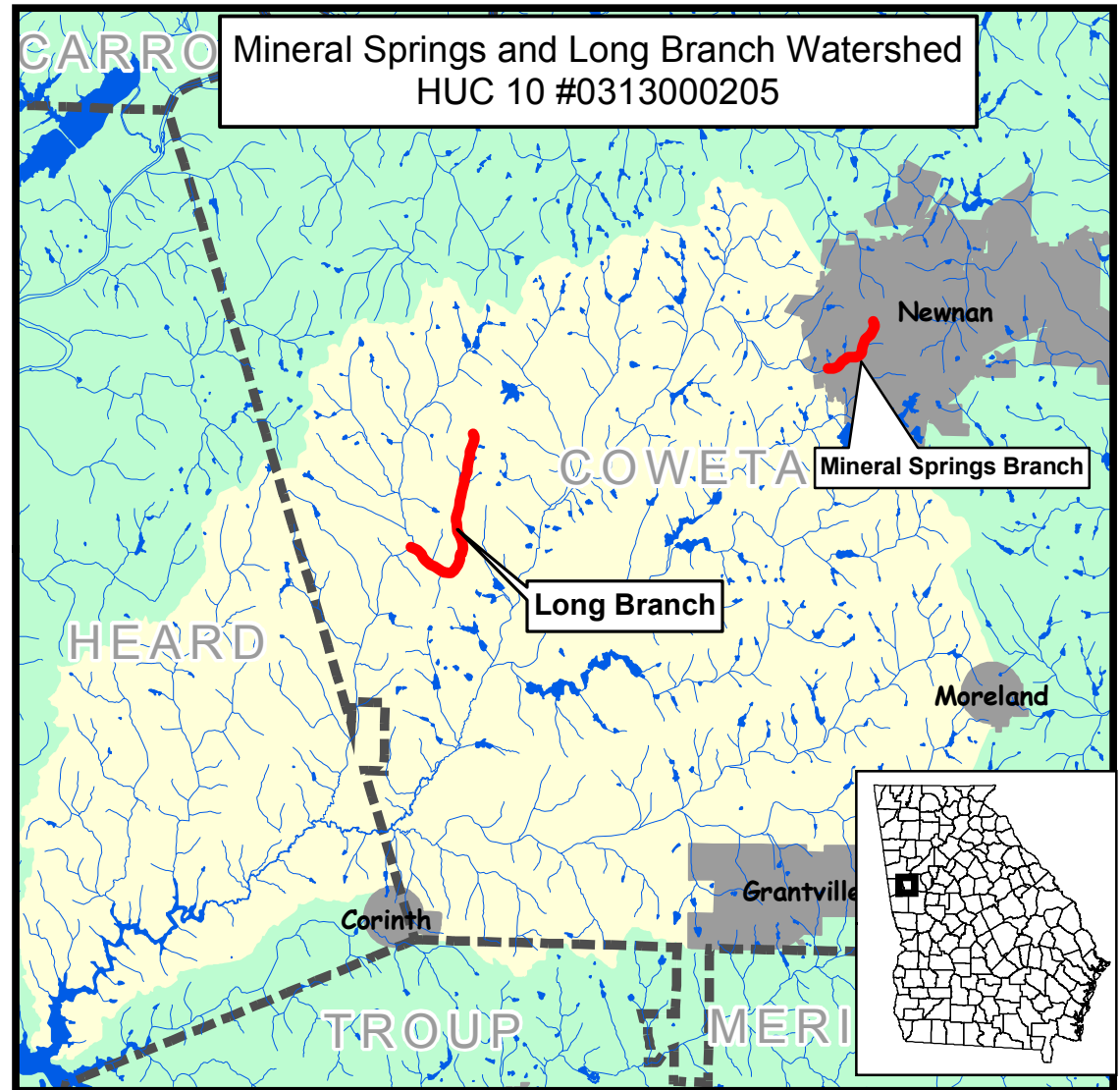


Table 1. IMPAIRMENTS

IMPAIRED STREAM SEGMENT	IMPAIRED SEGMENT LOCATION	IMPAIRMENT
Long Branch**	Coweta County	Biota(sediment)
Mineral Springs Branch	Newnan Upstream from Bonnell	Biota(sediment)
Mineral Springs Branch*	Newnan Downstream from Bonnell	Biota(sediment) & Toxicity
New River*	Heard/Coweta Counties	Fecal Coliform Bacteria

* Plan will be written by GA EPD ** Long Branch has a separate Implementation Plan

II. GENERAL INFORMATION ABOUT THE WATERSHED

Write a narrative describing the watershed. Include an updated overview of watershed characteristics. Identify new conditions and verify or correct information in the TMDL document using the most current data. Include the size and location of the watershed, political jurisdictions, and physical features that could influence water quality. Describe the source and date of the latest land cover/use for the watershed. Describe and quantify major land uses and activities that could influence water quality. See the instructions for more information on what to include.

Watershed Characteristics, Size and Location: The portion of Mineral Springs Branch watershed addressed by this Implementation Plan is contained primarily in the City of Newnan. A small portion of the segment is in Coweta County. The affected stream segment is 1 mile long and the watershed encompasses 1.3 square miles. It is an urban watershed on the western edge of Newnan characterized by a predominance of low to high-density residential land use, limited commercial and industrial use and some forested areas. The watershed has a dense network of paved roads. There are six hazardous waste handler sites and no NPDES permitted sites within the portion of the watershed addressed by this Implementation Plan.

New Data:

In 2004 Newnan Utilities completed a Water Resources Management Plan (WRMP) for Mineral Springs Branch and Snake Creek Watersheds for the purpose of fulfilling requirements to expand Mineral Springs Treatment Plant. The assessment included the entire watershed, much of which is outside of the study area of this Implementation Plan. The Assessment includes water quality collected in 2001 and 2002 and biological monitoring data collected in the summer of 2002. The WRMP includes recommendations for meeting water quality standards in both watersheds. Biological data was collected at a sample point at or near the one used to develop the TMDL, both are upstream from the tributary that is adjacent to Bonnell Company. Both assessments show similar results. The WRMP gave Mineral Springs Branch an IBI rank of Very Poor and an IWB rank of Poor, while the TMDL gave a rank of Very Poor for both IBI and IWB. Notes taken at the sampling point for the WRMP describe “deposition from erosion of banks” as the cause of the problem. The report noted a 25% vegetative cover on the banks and no livestock damage or beaver activity.

Land Use Land Cover:

Land use data collected for the Mineral Springs Branch WRMP shows some differences to the data collected for the TMDL. The amount of forest 40% seems comparable. The WRMP data shows approximately 3-5 % more commercial, industrial and transportation land use than the TMDL. Total residential is comparable but the WRMP data does not distinguish between high intensity and low intensity residential. There is no row cropping of pasture in the watershed.

Relevant Watershed Planning and Management Activities:

Mineral Springs and Snake Creek Water Resources Management Plan (WPMP) (described above):

Stormwater Management Programs: As part of Metropolitan North Georgia Water Planning District (MNGWPD), both the City of Newnan and Coweta County are in the process of setting up Storm Water Management Programs. The County submitted its Notice of Intent (NOI) in 2003. It had not received final approval at the time this document was written. The NOI describes Best Management Practices the County will implement concerning public education, public involvement, illicit discharge, construction site runoff, post construction stormwater management and pollution prevention. In addition the County is required to adopt the following six storm water ordinances by spring 2005: Conservation Subdivision

Ordinance, Litter Control Ordinance, Illicit Discharge and Illegal Connection Ordinance, Post Construction SW Management Ordinance, Floodplain Damage Prevention Ordinance, and Stream Buffer Ordinance.

E&S Program: Both Coweta County and the City of Newnan are revising their Soil Erosion & Sedimentation Control Ordinances to meet the new requirements mandated by House Bill 285. Permitting for both is done during the plan review process. The county engineer is responsible for enforcing both the ordinances. Coweta County has a Memorandum of Agreement with Georgia Soil and Water Conservation Society to issue land disturbance permits.

As part of Coweta County's the storm water management program required under the MNGWPD, the county intends to implement four BMPs that address erosion on construction sites: 1) adopt a system for erosion control inspections reporting & record keeping; 2) Establish a plan review process; 3) Pre-construction meetings with developers engineers & contractors; and 4) Hotline for the public to report any erosion control measures violations on land disturbing activities.

As part of Newnan's storm water management program required under the MNGWPD, the city will implement three BMPs that address erosion related to new construction: 1) Continue to all review applications for land disturbing activity for compliance with the Sedimentation and Erosion Control Ordinance, 2) Continue to run the Erosion and Sedimentation Site Inspection Program, and 3) Continue to review all engineering plans for post construction storm water.

Mineral Springs Branch

COMPLETE THE FOLLOWING TABLES FOR AND NARRATIVES ABOUT EACH IMPAIRED STREAM IN THE WATERSHED.

STREAM SEGMENT NAME	LOCATION	MILES/AREA	DESIGNATED USE	PS/NS
Mineral Springs Branch	City of Newnan	1 mi./ 1.33 sq.mi.	Fishing	PS

III. SOURCES AND CAUSES OF STREAM SEGMENT IMPAIRMENT LISTED IN TMDLs

After reviewing the TMDLs written for this stream, complete the following tables with **the information found in the TMDLs**. List each parameter for which the stream segment is impaired and the water quality standard violated. See the instructions for the water quality standards. Describe the sources and causes of each violation identified in the TMDLs.

Table 2. SOURCES OF IMPAIRMENT AS INDICATED IN TMDLs

PARAMETER 1	WQ STANDARD	SOURCES OF IMPAIRMENT	NEEDED REDUCTION FROM TMDL
Biota	No degradation to fish community	Low intensity Res 41.22%, Row Crops 31.15 %, Roads 22.94% Urban Recreation 1.62%, Pasture 1.50%, High Intensity Res 1.07% Com/Ind .19% Mixed Forest .14%, Decid Forest .11%, Evergreen Forest .06%	0%

IV. IDENTIFICATION AND RANKING OF POTENTIAL SOURCES OR CAUSES OF IMPAIRMENT

INVESTIGATE AND EVALUATE the sources of impairment for each parameter listed in Table 2. Write a narrative describing efforts made or procedures used to verify the significance and extent of the sources or causes of each impairment listed in the TMDLs. Include:

- Involvement of stakeholder group
- Field surveys
- Review of land cover data
- Evaluation of sources

Evaluation of Sources Found in the TMDL

NOTE: The *Total Maximum Daily Load Evaluation Thirty-One Stream Segments in the Chattahoochee River Basin For Sediment (GAEPD, 2003)* states that based on findings, “it was determined that most of the sediment in the Chattahoochee River Basin streams is due to ‘legacy’ sediment. Therefore it is recommended that there be no net increase in sedimentin order that these streams recover over time” (pg.64). This indicates that it emphasis should focus on avoiding future and current erosion rather than to determining the cause of the existing impairment, which probably occurred because of past land use.

Low Intensity Residential: the TMDL attributes 36.29% of the land use and 41.22% of the sediment load to low intensity residential land use. The draft WRMP identifies the increase in impervious surface in the watershed as a primary contributor to biotic and habitat degradation in the Mineral Springs watershed. Most of the watershed is zoned for medium density residential development.

Row Cropping: The TMDL attributes 1% of the land use and 31.15% of the sediment load to row cropping. Land use data collected for the 2003 Mineral Springs Branch WRMP shows there is no row cropping in the watershed

Roads: The TMDL attributes 22.92 % of the sediment load to roads. The watershed is urbanized and has many roads. WRMP identifies the increase in impervious surface in the watershed as a primary contributor to biotic and habitat degradation in the Mineral Springs watershed.

Urban Recreational Grasses (Parks) :the TMDL attributes 8.89% of land use and 1.62% of the sediment load to recreational grasses. There is no further information on this potential source.

Pasture: The TMDL attributes 4% of the land use and 1.5% of the sediment load to pasture. Land use data collected for the 2003 Mineral Springs Branch WRMP shows there is no pasture in the watershed

High Intensity Residential : the TMDL attributes 5.53% of land use and 1.07% of the sediment load to high intensity residential land use. The draft WRMP identifies the increase in impervious surface in the watershed as a primary contributor to biotic and habitat degradation in the Mineral Springs watershed. Much of the upper watershed is zoned for medium to high-density residential development. This land use may have a larger impact as build-out occurs.

Commercial/ Industrial/Transportation: the TMDL attributes 2.63% of the land use and less than 1% of the sediment load to this land use. The draft WRMP identifies the increase in impervious surface in the watershed as a primary contributor to biotic and habitat degradation in the Mineral

Springs watershed. Since there is little of this land use in the watershed its contribution is currently minimal. Current zoning for Newnan does not allow increased commercial and industrial land use in the watershed.

Forest: the TMDL attributes 41.37 percent of the land use and less than 2% of the sediment load to forest. No active forestry was observed in the watershed. This land use will diminish as build out occurs.

Evaluation of sources not found in the TMDL

New Construction: New construction will continue to be a source of sediment in Mineral Springs Watershed until it reaches build out. Land use projections anticipate that low density residential will be the primary land use by 2015 while forest nearly disappears (City of Newnan Zoning Ordinance and Future Land Use Map).

To the extent possible, identify sources and quantify the extent of pollution in the stream segment for each of the parameters listed in Table 2 and evaluate the likely impact on the parameter load to the stream. This should follow research performed and described in preceding narrative and should correct or add information to the TMDLs. **The SOURCES SHOULD BE RANKED** from those having the most impact to those having the least impact. The estimated extent of contribution can be expressed as the area of the watershed effected, the stream miles effected, or the number of activities contributing to the problem. The magnitude of contribution should be estimated to be large, moderate, small, or negligible.

Table 3. CONCLUSIONS MADE OF POTENTIAL SOURCES OF STREAM SEGMENT IMPAIRMENT

PARAMETER 1	POTENTIAL SOURCES	ESTIMATED EXTENT OF CONTRIBUTION	ESTIMATED MAGNITUDE OF CONTRIBUTION	COMMENTS
Biota	Low Density Residential	Lower Watershed	Large	The draft WRMP identifies urban development and increase of impervious surface as the primary current and future sediment source in the watershed.
	Roads	Entire Watershed	Large	
	New Construction*	Below 27 to sampling point	Large	
	High Density Residential	Upper watershed east of Boone Drive	Moderate	
	Commercial / Industrial	Small part of upper watershed. Limited number of activities	Small	There is a small commercial district and light industrial area in the upper watershed. No other areas are zoned for these land uses at this time.
	Urban Recreational Grasses	N/A	Negligible	Not a significant contributor of sediment
	Forest	N/A	Negligible	No active forestry in watershed
	Pasture	N/A	Negligible	None found in watershed
	Row Cropping	N/A	Negligible	None found in watershed

* **Potential Source not identified in TMDL.** Source was found to be a potential contributor during the course of this assessment.

V. STAKEHOLDERS

PUBLIC INVOLVEMENT AND THE ACTIVE PARTICIPATION OF STAKEHOLDERS is essential to the process of preparing TMDL implementation plans and improving water quality. Stakeholders can provide valuable information and data regarding their community, impaired water bodies, potential causes of impairments, and management practices and activities which may be employed to reduce the impacts of the causes of impairment.

Describe outreach activities to advise and engage stakeholders in the TMDL implementation plan preparation process. Describe the stakeholder group employed or formed to address the impaired segments in the watershed. Summarize the results of the number of attendees and meetings and describe major findings, recommendations, and approvals.

Stakeholders were notified of the project by mail. An article describing the project also appeared in all the local newspapers. The letter received by individual stakeholders and the article described three ways for interested parties to engage in the process; 1) attend one of five county stakeholder meetings, 2) contact CFRDC staff directly through e-mail or by phone, and 3) view and comment on the draft plans on the CFRDC website between June 28th and July 14th 2004.

Meetings: Meetings were held in each of CFRDC's five counties (see attachment). CFRDC staff developed presentation boards for the meetings that contained a map of each of the nine affected streams, land use data that had been provided in the TMDL, and preliminary findings, if any. Sampling data was also provided for all the streams. After a short presentation, participants were asked to examine and comment on the data and offer insight into current watershed conditions. Participants were supplied with comment sheets. Stakeholders from the City of Newnan, Newnan Utilities, Coweta County, the Georgia Forestry Commission, the NRCS and other agencies with an interest in Mineral Springs Creek Watershed attended the Coweta County Meeting. Information about all nine watersheds was presented at each meeting because many stakeholders had an interest in watersheds in more than one county.

Press Releases: Two Press Releases ran in local newspapers during the course of the project (see attachment). The first ran in early May 2004. It alerted readers to the project, meeting times and ways to participate. The second ran in early October 2004. It gave an update on the project and asked for participation through direct contact with staff or by reviewing the plans on CFRDC's website.

Comments from Website: the nine TMDL Implementation Plans were posted on CFRDC's website on June 28th 2004 for the purpose of receiving comment. Stakeholders who attended meeting of contacted CFRDC staff directly were asked to visit the website and comment on the draft plans.

Advisory Group: CFRDC formed a Water Issues Committee (WIC) in 2000 for the purpose of guiding the agency on TMDL, Source Water Assessment Plans (SWAP) and other water related issues. The WIC consists of two or more representatives from each county who were appointed by the local governments. During this TMDL process, this group met in mid July 2004 to review draft plans and develop public outreach activities.

Major Findings and Comments from Stakeholder Involvement:

1. Newspaper articles are the most effective method for public outreach. Educating children, public meetings, events and Adopt-a-Stream were also mentioned.
2. More accurate data is needed to make a scientifically based determination on source and impairment.

Comments as received on Comment Sheets at meetings:

Additional Comments:

“Data Collection methods and sampling points need to be examined to determine source of listing errors”

“I think the data needs to be updated and the causes determined, before making recommendations on how to improve.”

“More ground pounding needs to be done by the people that can get things done. Seeing the presence of GFC, EPD in a friendly way helps much. Too much of what is seen of EPD is only on TV or in a few law enforcement cases.

More ground pounding needs to be done by people gathering and using the data for watershed management plans. Using satellite imagery is great for figuring land use statistics only as long as it is checked on the ground.

Consideration has to be given to the fact that it took hundreds of years of human misuse to cause our problems we see today and no law or education is going to change things in only a few years. We as citizens need to get serious about solving the problems instead of just looking like we are solving them. There is more talk, monitoring, and laws about soil disturbances than ever, but nearly every construction site I see is still putting silt in streams because of improper installation or maintenance of sediment control structures. Sometimes just the installation of silt fence causes a major problem. These comment sheets are a good start if used.”

“Good formatting for TMDL reporting.

I note that we might add Georgia's Better Back Road Program (What is it?) to Management Measures for Town Creek, Cavender Creek, Long Branch Creek, and the Tributary of Flat Shoals Creek, especially if it addresses both public county and private unsurfaced roads. Primarily, unsurfaced county road crews must be educated. Are there no possible management measures for Off Highway Vehicle abuse of utility easements and elsewhere? There is a National Off Highway Vehicle Conservation Council (NOVHCC) and a Georgia Association of Recreational Trail Riders Association (GARTRA) that may address this as stakeholders. How might we review the GA EPD developed TMDL reports?”

List the watershed or advisory committee members of the stakeholder group for this segment in the following table.

Table 4. COMMITTEE MEMBERS

NAME/ORG	ADDRESS	CITY	ST	ZIP	PHONE (W)	PHONE (H)
Denny Ivey/CFRDC Water Issues Committee	103 Carroll Circle	Carrollton	GA	30117	770-832-2171	
Brenda Rice/CFRDC Water Issues Committee	300 Old Goldmine Road	Villa Rica	GA	30180	770-830-6673	
Loren McCune/CFRDC Water Issues Committee	PO Box 428	Newnan	GA	30264	770-253-2020	770-253-9357
David Brown/CFRDC Water Issues Committee	1770 Al Robert Road	Senoia	GA	30276		770-599-1830
Robert Blackburn/CFRDC Water Issues Committee	200 Joe Ben Lee Road	Newnan	GA	30263	770-253-6990	770-253-6728
Bob Jones/CFRDC Water Issues Committee	252 Jones Road	Franklin	GA	30217	706-675-3053	706-675-3049
Doug Craven/CFRDC Water Issues Committee	2404 Armstrong Mill Road	Franklin	GA	30217		770-854-8186
C.E. Withrow/CFRDC Water Issues Committee	940 Linda Lane	Manchester	GA	31816	706-846-3525	
Bill Tomlin/CFRDC Water Issues Committee	807 McCurdy Boulevard	Manchester	GA	31816		706-846-2717
A.J. McCoy/CFRDC Water Issues Committee	571 Alvaton Road	Gay	GA	30218	404-506-0919	772-927-9055
Arthur Holbrook/CFRDC Water Issues Committee	215 Cofield Road	LaGrange	GA	30240		706-884-7905
Buck Davis/CFRDC Water Issues Committee	1134 Young's Mill Road	LaGrange	GA	30240		706-884-1621
David Brown/CFRDC Water Issues Committee	Post Office Box 430	LaGrange	GA	30241	706-883-2000	

In Appendix A, list the names, addresses, telephone numbers, and e-mail addresses for local governments, agricultural or commercial forestry organizations, significant landholders, businesses and industries, and local organizations including environmental groups and individuals with a major interest in this watershed.

VI. MANAGEMENT MEASURES AND ACTIVITIES

Describe any management measures or activities that have been put into place or will be put into place including regulatory or voluntary actions or other controls by governments or individuals that specifically apply to the pollutant that will help achieve water quality standards. Include who will be responsible for the measure, how it will be funded, the status, the date it will be or was initiated, and a short description of how effective the measure is or will be.

Table 5. MANAGEMENT MEASURES AND ACTIVITIES

MEASURES APPLICABLE TO Biota

MEASURE	RESPONSIBILITY	DESCRIPTION	SOURCE OF FUNDING	STATUS	ENACTED/ IMPLEMENTED	EFFECTIVENESS (Very, Moderate, Weak)
Enforcement of Erosion & Sedimentation Control Ordinance	Newnan & Coweta County		Local	Underway	Amended Summer 2004	Very effective if properly enforced.
Implementation of Stormwater Management Program	Coweta County City of Newnan	BMPs concerning public education, public involvement, illicit discharge, construction site runoff, post construction stormwater management and pollution prevention., and the adoption of six ordinances.	County Newnan	Underway, full implementation by 2005	March 2003	Moderate, not all measures deal with erosion
NPDES Permitting	EPD Permittee		EPD Permittee	Underway		Week none in watershed
Public Outreach	CFRDC	CFRDC will distribute findings of Implementation Plans to local governments, agencies and citizen groups.	Local	Planned	Sept-Dec. 2004	Moderate

VII. MONITORING PLAN

The purposes of monitoring are to obtain more data, to determine the sources of pollution, to describe baseline conditions, and to evaluate the effects of management and activities on water quality. Describe any sampling activities or other surveys - active, planned or proposed - and their intended purpose. Reference the development and submission of a Sample Quality and Assurance Plan (SQAP) if monitoring for delisting purposes.

Table 6. MONITORING PLAN

PARAMETER(S) TO BE MONITORED	ORGANIZATION	STATUS (CURRENT, PROPOSED, PLANNED)	TIME FRAME		PURPOSE (If for delisting, date of SQAP submission)
			START	END	
All	Georgia EPD	Planned	2005	2005	Basin Monitoring
All	City & County	Planned	2005	On-going	Storm Water Management Program

VIII. PLANNED OUTREACH FOR IMPLEMENTATION

List and describe outreach activities which will be conducted to support this plan and the implementation of it.

Table 7. PLANNED OUTREACH

RESPONSIBILITY	DESCRIPTION	AUDIENCE	DATE
CFRDC	TMDL section on CFRDC web page will contain all Implementation Plans, information about the TMDL process, links to other web pages and an area for comments	Local governments and some citizens	Starts July 2004 and continues indefinitely
CFRDC	News releases in all local papers when final plans are approved	Residents and stakeholders	December 2004

IX. MILESTONES/ MEASURES OF PROGRESS OF BMPs AND OUTREACH

This table will be used to **track and report progress of management measures including BMPs and outreach**. Record milestone dates for:

- accomplishment of management practices or activities - outreach activities
- installation of BMPs

to attain water quality standards. Comment on the effectiveness of the management measure, how much support the measure was given by the community, what was learned, how the measure might be improved in the future, and any other observations made. This table can be "pulled out" of this template and used to report and track progress.

Table 8. MILESTONES

MANAGEMENT MEASURE	RESPONSIBLE ORGANIZATIONS	STATUS		COMMENT
		PROPOSED	INSTALLED	
Enforcement of Erosion & Sedimentation Control Ordinance	Newnan & Coweta County	Revised 2004	Adopted 2004	
Implementation of Stormwater Management Program	Coweta County City of Newnan	2004	Ongoing	
NPDES Permitting	EPADPermitee	N/A	N/A	Ongoing Program
TMDL Section on CFRDC Website	CFRDC	May 2004	July 2004	On-going

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Date Submitted to EPD:	November 30 2004	Revision:	

APPENDIX A.

STAKEHOLDERS

List the names, addresses, telephone numbers, and e-mail addresses for local governments, agricultural or commercial forestry organizations, significant landholders, businesses and industries, and local organizations including environmental groups and individuals with a major interest in this watershed.

NAME/ORG	ADDRESS	CITY	STATE	ZIP	PHONE	E-MAIL
Mr. Cleatus Phillips City of Newnan, Community Development	25 LaGrange Street	Newnan	GA	30263	-NA-	-NA-
Mr. James Emery City of Newnan, Engineering	25 LaGrange Street	Newnan	GA	30263	-NA-	-NA-
Mr. Lorne McQuine William T. Bonnell, Environmental	25 Bonnell Street	Newnan	GA	30263	-NA-	-NA-
Mr. Edward Strong Newnan Utilities	70 Sewell Road	Newnan	GA	30263	-NA-	-NA-

APPENDIX B.

UPDATES TO THIS PLAN

Describe any updates made to this plan. Include the date, section or table updated, and a summary of what was changed and why.

**APPENDIX C.
EXHIBITS**



These images, taken with a 3/4 of a mile of each other, illustrate the diversity of current land use in the watershed. Current zoning allows for mid to high-density residential development in the majority of the watershed. The draft WRMP identifies urban development and increase of impervious surface as the primary current and future sediment source in the watershed

Attachments

Meeting Time & Places Flier (hard copy only)
Sample Press Release # 1 (hard copy only)
Sample Press Release #2 (hard copy only)